DOCUMENT RESUME

ED 074 348 AC 014 291

AUTHOR Gran, James R.
TITLE A Comparative Analysis of Selected Responses to the Four Year Follow-Up Questionnaires Returned by the Graduates of the Jackson County Adult Evening High School Classes of 1967-68-69.
INSTITUTION Jackson County Adult Evening High School Program, Maquoketa, Iowa.
PUB DATE Apr 73
NOTE 55p.

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS Adult Education Programs; *Comparative Analysis; *Continuation Education; Dropout Programs; Educational Attitudes; Employment Patterns; Evening Programs; *Followup Studies; *Graduate Surveys; Questionnaires; Tables (Data); Technical Reports

ABSTRACT

A comparative study was made of responses to the four-year followup questionnaires of the classes of 1967-68-69 of Jackson County Adult Evening High School. The purposes were to reveal any significant differences between classes in their responses, to answer questions concerning the benefits received by high school graduation, and to obtain results that would make the conclusions drawn more valid than they might be for any single class because of the larger numbers involved. The three followup studies were compared on a question-by-question basis. Among the results obtained are the following: (1) the benefits (educational, social and/or financial) do not differ significantly among these classes, regardless of class size, year of graduation, age or sex; (2) the program enables a significant number of housewives to seek and find employment which they did not do prior to completion of high school; (3) a very significant number of graduates in the labor market experience job changes or promotions far in excess of what could occur by chance; (4) about 12% have received additional training beyond high school; (5) nearly 23% have studied some subject since graduation; and (6) there were no significant differences between classes or between men and women in the numbers reporting to be better off financially. Recommendations concerning use of the study, this and similar programs, and dropout studies are made. (For related document, see AC 014 268.) (KM)

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

ED 074348

# A COMPARATIVE ANALYSIS OF SELECTED RESPONSES TO THE FOUR YEAR FOLLOW-UP QUESTIONNAIRES RETURNED BY THE GRADUATES OF THE JACKSON COUNTY ADULT EVENING HIGH SCHOOL CLASSES OF 1967-68-69

BY JAMES R. GRAN
PROJECT ADMINISTRATOR

COMPLETED APRIL, 1973

AC 014 291

FILMED FROM BEST AVAILABLE COPY

# PREFACE

This comparative study of responses to the four-year follow-up questionnaires of the Classes of 1967-68-69, is the first time this type of study has been conducted of the graduates of this adult program.

It was undertaken with the hope that it might reinforce the findings of earlier studies, reveal any inconsistencies among classes, and in general add a little more to our limited knowledge of these adult graduates and this program.

If programs of this kind are successful in improving the lives of most of these graduates financially, socially and/or educationally, there are some serious questions that remain unanswered as to why these graduates did not or could not complete their high school education in regular day school.

It implies that perhaps we need to critically review existing curriculums, the granting of credit on the basis of clock hours in the classroom, unwise school board policies, administrative rules, scheduling of classes, and many other areas of school operation that may be in need of revision.

The problem of school dropouts is still a major problem in this and other areas, but adult programs such as this one are not the answer to the dropout problem. These programs are at best remedial, and what is most needed is a preventative program.

There will remain a need for adult programs of this type, however, as long as the dropout problem remains unsolved and a backlog of adults needing to complete their high school education remains.

## ACKNOWLEDGEMENTS

We wish to acknowledge the graduates of the classes of 1967-68-69 for their excellent response to the four-year follow-up questionnaires. It is their participation in these surveys that have made this and other studies possible.

We recognize also the contribution made by the teachers in the adult program, without whom there would be no effective adult program. Their interest extends beyond monetary reward, and they sacrifice much in terms of time away from their families.

Also to be commended are the Local Boards of Education, the Jackson County Board of Education, and the taxpayers for their cooperation and support of this adult program.

TABLE OF CONTENTS

CHAPTER I. BACKGROUND INFORMATION

The Problem..... 1

The Purpose..... 2

Related Studies..... 2

Assumptions..... 2

Questionnaire..... 3

Hypothesis..... 3

Results of this Study..... 3

Definition of Terms..... 4

Method of Attack..... 4

CHAPTER II. FINDINGS

General Information..... 6

Class memberships..... 6

Respondents..... 6

Percent returns..... 6

Number working..... 6

Number in labor market..... 6

Number Self-employed..... 6

Occupational Classifications..... 7

Individual classes..... 8

Grouped classes..... 9

CHAPTER III. ANALYSIS OF DATA

Employed and Not Employed..... 14

Housewives and Number Employed..... 15

Analysis of Question One - Observed Changes and Promotions... 16
" " " Two - Stated Changes and Promotions..... 22
" " " Three - Related to Adult Program..... 24
" " " Four - Income Increase..... 26
" " " Five - Training Beyond High School Level. 28
" " " Six - Training Not Possible Without Diploma..... 29
" " " Seven - Additional High School or Interest Subjects..... 30
" " " Eight - Better Off Financially..... 31
" " " Nine - How Much Better Off Financially... 34
" " " Ten - Worth Time and Effort - Financially.36
" " " Eleven - Better Off Socially.....38
" " " Twelve - How Much Better Off - Socially.....40
" " " Thirteen - Worth Time and Effort - Socially....42
" " " Fourteen - Wise Use of Tax Money.....43
" " " Fifteen - Knowledge Improved.....43
" " " Sixteen - Additional Comments.....43

CHAPTER IV. SUMMARY - CONCLUSIONS - RECOMMENDATIONS

Summary.....45
Conclusions.....46
Recommendations.....49

LIST OF TABLES

Table I..... 6
Table II..... 8
Table III..... 9
Table IV..... 10

# CHAPTER I

## BACKGROUND INFORMATION

### The Problem:

The Jackson County Adult Evening High School Completion Program has completed seven years of operation. Each of the graduating classes has been or will be the subject of a one-year and four-year follow-up study.

Three of these classes have now been surveyed four years after graduation. A total of two hundred fifty-two members were graduates of these three Classes of 1967-68-69. A total of two hundred thirty-three of these graduates responded to the four-year questionnaires for a combined return of ninety-two (92.46) percent.

We have been particularly interested in whether or not the results of these studies are consistent or variable and if the results obtained are statistically sound.

It was necessary to wait until now for a comparison of this type, for two reasons:

1. Four years had to elapse after graduation before each class could be surveyed (a total of six years before data on these three classes became available).
2. Three classes had to be included before two hundred or more graduates would have responded to the questionnaires. This was a minimum number arbitrarily desired.

The Purpose:

This comparative study should reveal any significant differences between these three graduating classes in their responses to the questionnaire used in the four-year follow-up studies.

It should also answer such questions as: "Do men benefit more or less than women by graduating from high school? Does any graduate benefit? How have they benefited?"

The combined data should also yield results that would make the conclusions drawn more valid than they might be for any single class of graduates simply because of the larger numbers involved.

Hopefully, the results might encourage others, who have not completed their high school education, to do so by enrolling in classes of this kind.

In addition, it might encourage the establishment of similar programs in other areas and encourage financial support for such programs.

Related Studies:

To the knowledge of this writer, no identical studies of this kind have been made.

Assumptions:

It is assumed that the respondents understood the questions used on the questionnaires being compared and answered them honestly.

It is further assumed that the questions asked on the questionnaires do measure educational, financial and social benefits received by graduates of this adult program.

Questionnaires:

Since this is a comparative study of three four-year follow-up studies previously completed, no additional questionnaire was used.

The identical questionnaire was used for all three classes, and the responses therefore are readily comparable.

Hypothesis:

Since identical four-year follow-up studies have previously been made of each of these three classes, an analysis of responses by comparison of these responses should indicate, if and where any consistencies or differences occur, and whether or not these are significant or chance occurances.

If the adult program is benefiting our graduates these results should be measurable to some degree by these graduates, and should appear consistently among these graduates.

The null hypothesis of no significant differences will be used to test for differences among these three classes in their responses to the questions being compared.

A few comparisons will be made based upon a stated assumption, and many percentage comparisons will also be made.

Results of this Comparative Study:

The results of this study will be used to encourage more adults to enroll in programs of this type, encourage establishment of similar programs, encourage governmental agencies to financially support such programs, and to justify the investment of tax funds in such programs.

Hopefully, the results may also encourage local school districts to reflect upon their dropout problems and resolve this problem through revision of unwise policies, rules, curriculum, scheduling, etc., and initiation of experimental approaches to the problem.

Definition of Terms:

For the purpose of this comparative study, the following terms are defined:

Housewife: A married woman not working for wages.

Part-time Worker: One who regularly works part-time for wages.

Full-time Worker: One who regularly works full-time for wages, salary, or profit.

Unemployed Worker: One who is temporarily out of work.

Disabled Worker: One who cannot work because of physical handicaps.

In Labor Market: Any graduate who has worked at any time, for any length of time, at enrollment or between enrollment and four years after graduation for wages, salary or profit.

Number Working: Number of graduates employed at the time the four year follow-up questionnaire was completed.

Method of Attack:

The three four-year follow-up studies will be compared on a question by question basis. Responses to sixteen specific questions will be compared by tabulating the frequencies by class in adjacent columns. Frequencies will be converted to percentages so that both frequencies and percentages may be compared.

Where possible, additional comments and statistical comparisons will be made in an attempt to interpret the data and verify the conclusions reached.

# CHAPTER II

## SUPPORTING DATA

General Information:

Table I presents some basic information concerning the three classes being compared. This information represents one interval in time (four years after graduation) for each of the three classes.

TABLE I

GENERAL INFORMATION - FOUR YEARS AFTER GRADUATION

CONCERNING THE GRADUATES - CLASSES OF 1967-68-69

JACKSON COUNTY ADULT EVENING HIGH SCHOOL

| | Class of 1967 | Class of 1968 | Class of 1969 | Total |
|---|---|---|---|---|
| a. Membership | 41 | 111 | 100 | 252 |
| b. Respondents to 4-year follow-up | 39 | 104 | 90 | 233 |
| c. Percent Return | 95 | 94 | 90 | 92.5 |
| d. Number Working (at time of 4-year follow-up) | 25 | 72 | 68 | 165 |
| e. Number in Labor Market (at anytime- Enrollment-1 year or 4 years after graduation) | 31 | 75 | 76 | 182 |
| f. Number Self-Employed (at time of 4-year study and included in d and e above) | 2 | 9 | 8 | 19 |

Several items of interest are observable in Table I. They are:

1. Total membership of these three classes is 252.
2. Total combined responses to the four-year follow-up studies were 233.

3. The average combined return of the four-year study questionnaires was 92.46%.
4. The number working at the time of the four-year studies was 165.
5. The total number who were employed at any time, for any length of time, from enrollment to four-years after graduation was 182.
6. The total number of self-employed at four years after their graduation was 19. This number is included in both the number currently working and number in labor market.

The high percentage of returns gives us a very good sampling of this population of graduates in these three classes.

Occupational Classifications:

Table II presents more detail of the occupational classification of these respondents at two time intervals, enrollment and four years after graduation. The percent of change between these two time periods is also listed for each of the three classes.

Table III presents these same classifications as a total of the three classes.

Both Table II and III present the occupational changes between enrollment and four-years after graduation.

Most notable, of course, is the dramatic reduction in the number of housewives, and the corresponding increase in part and full-time women workers.

However, since most of the other women and men were employed part or full-time at enrollment and four-years after graduation, job or financial benefits to these groups are not readily seen in this table. These benefits will be seen, however, later.

By Individual Graduating Classes:

TABLE II

OCCUPATIONAL CLASSIFICATION

AT ENROLLMENT AND FOUR YEARS AFTER GRADUATION

CLASSES OF 1967-68-69

| Classification | Class of 1967 Number of Graduates-41 Res. to 4-yr follow-up-25 Number Currently Employed-25 | | | | | Class of 1968 Number of Graduates-111 Res. to 4-yr follow-up-104 Number Currently Employed-72 | | | | | Class of 1969 Number of Graduates-100 Res. to 4-yr follow-up-90 Number Currently Employed-68 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | At Enr. | % of Total Class | At 4 year | % of Total Class | % of Change | At Enr | % of Total Class | At 4 year | % of Total Class | % of Change | At Enr | % of Total Class | At 4 year | % of Total Class | % of Change |
| Housewives | 19 | 46.4 | 15 | 36.6 | -9.8 | 47 | 42.4 | 30 | 27.0 | -15.4 | 41 | 41.0 | 30 | 30.0 | -11.0 |
| Part-time Men | - | - | - | - | - | 1 | .9 | - | - | + .9 | 3 | 3.0 | - | - | - 3.0 |
| Part-time Women | 1 | 2.4 | 4 | 9.7 | +7.3 | 6 | 5.4 | 18 | 16.2 | +10.8 | 6 | 6.0 | 9 | 9.0 | + 3.0 |
| Full-time Men | 8 | 19.5 | 9 | 22.0 | +2.5 | 39 | 35.1 | 36 | 32.5 | - 2.6 | 32 | 32.0 | 35 | 35.0 | + 3.0 |
| Full-time Women | 12 | 29.3 | 12 | 29.3 | - | 16 | 14.4 | 18 | 16.2 | + 1.8 | 18 | 18.0 | 24 | 24.0 | + 6.0 |
| Unemployed Men | 1 | 2.4 | - | - | - | 1 | .9 | 4 | 3.6 | - 3.6 | - | - | - | - | - |
| Unemployed Women | _ | - | 1 | 2.4 | +2.4 | - | - | 1 | .9 | - .9 | - | - | 1 | 1.0 | + 1.0 |
| Disabled Men | - | - | - | - | - | 1 | .9 | 2 | 1.8 | + .9 | - | - | - | - | - |
| Disabled Women | - | - | - | - | - | - | - | 1 | .9 | + .9 | - | - | 1 | 1.0 | + 1.0 |
| Student | - | - | - | - | - | - | - | 1 | .9 | + .9 | - | - | - | - | - |
| Totals | 41 | 100.0 | 41 | 100.0 | | 111 | 100.0 | 111 | 100.0 | | 100 | 100.0 | 100 | 100.0 | |

Graduation Classes Combined:

TABLE III

ALL CLASSES GROUPED BY OCCUPATIONAL CLASSIFICATION

AT ENROLLMENT AND FOUR YEARS AFTER GRADUATION

CLASSES OF 1967-68-69

| Classification | At Enr. | % of otal | At 4 yrs | % of Total | % Change | |
|---|---|---|---|---|---|---|
| Housewives | 107 | 42.5 | 75 | 29.8 | -12.7 | |
| Part-time Men | 4 | 1.6 | - | - | - 1.6 | |
| Part-time Women | 13 | 5.2 | 31 | 12.3 | + 7.1 | |
| Full-time Men | 79 | 31.3 | 80 | 31.7 | + .4 | |
| Full-time Women | 46 | 18.2 | 54 | 21.4 | + 3.2 | |
| Unemployed Men | 2 | .8 | 4 | 1.6 | + .8 | |
| Unemployed Women | - | - | 3 | 1.2 | + 1.2 | |
| Disabled Men | 1 | .4 | 2 | .8 | + .4 | |
| Disabled Women | - | - | 2 | .8 | + .8 | |
| Students | - | - | 1 | .4 | + .4 | |
| Totals | 252 | 100.0 | 252 | 100.0 | | |

Questions and Responses Being Compared:

Table IV presents the questions asked on the four-year follow-up questionnaires being compared and the frequency of responses by each of the three classes.

Percentage relationships are also presented in Table IV. This and the earlier tables provide most of the data used in the question by question analysis presented in Chapter III.

TABLE IV

QUESTIONS AND RESPONSES - FOUR YEARS AFTER GRADUATION

CLASSES OF 1967-68-69

JACKSON COUNTY ADULT EVENING HIGH SCHOOL

| Question or Observation | Class of 1967 | | Class of 1968 | | Class of 1969 | | Total | | Avg. % |
|---|---|---|---|---|---|---|---|---|---|
| | # of resp. | as % in labor market | # of resp. | as % in labor market | # of resp | as % in labor market | # of resp. | | |
| 1. Number of individuals observed receiving at least one positive employer change or stated promotion between enrollment and four years after graduation | 24 | 77.4 | 59 | 78.7 | 50 | 72.5 | 133 | | 73.1 |
| Cummulative number of observed employer changes or stated promotions on both one and four year follow-up studies | 29 | 93.5 | 76 | 98.7 | 66 | 86.8 | 171 | | 94.0 |
| Number of individuals observed receiving or reporting two or more employer changes or promotions | 5 | 16.1 | 17 | 22.7 | 16 | 21.1 | 38 | | 20.8 |
| Not employed: | | as % of res. | | as % of res. | | as % of res. | | | |
| Housewives | 15 | 38.5 | 30 | 28.8 | 30 | 33.3 | 75 | | 32.2 |
| Unemployed | 1 | 2.6 | 5 | 4.8 | 1 | 1.1 | 7 | | 3.0 |
| Disabled | 0 | - | 3 | 2.9 | 1 | 1.1 | 4 | | 1.7 |
| Student(Full-time) | 0 | - | 1 | .01 | - | - | 1 | | .004 |
| 2. Stated changes or promotions in response to the question, "Have you had any change in jobs or promotion on the job as a result of attending and graduating from the Adult High School Program?" | 11 | as % of # working 44.0 | 31 | as % of # working 43.0 | 24 | as % of # working 35.3 | 66 | | 40.0 |
| 2a. Number reporting changes | 8 | | 22 | | 18 | | 48 | | |
| Number Reporting Promotions | 3 | | 14 | | 11 | | 28 | | |
| Total | 11 | | 36* | | 29* | | 76* | | |

* Five individuals in each of the classes of 68 and 69 reported both changes and promotions but were counted only once in #2 so the number of individuals affected would be known.

| | | "67" | | "68" | | "69" | | Totals | |
|---|---|---|---|---|---|---|---|---|---|
| 3. How many of these changes or promotions have been a direct or indirect result of your completing high school? | | # of resp. | as % of total | # of resp. | as % of total | # of resp. | as % of total | # of resp. | Avg. % |
| | Direct or Indirect | 8 | 72.7 | 24 | 77.4 | 21 | 75.0 | 53 | 75.7 |
| | Not related | 2 | 18.2 | 5 | 16.1 | 5 | 17.9 | 12 | 17.2 |
| | No Response | 1 | 9.1 | 2 | 6.5 | 2 | 7.1 | 5 | 7.1 |
| | Total | 11 | | 31 | | 28 | | 70 | |
| 4. Did your income increase? | Yes | 8 | 72.7 | 26 | 83.9 | 23 | 82.2 | 57 | 81.4 |
| | No | 3 | 27.3 | 1 | 3.2 | 3 | 10.7 | 7 | 10.0 |
| | No Response | 0 | | 4 | 12.9 | 2 | 7.1 | 6 | 8.6 |
| | Total | 11 | | 31 | | 28 | | 70 | |
| 5. Received any training beyond high school level since graduating? | Yes | 3 | 7.7 | 9 | 8.7 | 16 | 17.8 | 28 | 12.0 |
| | No | 34 | 87.2 | 90 | 86.5 | 68 | 75.6 | 192 | 82.4 |
| | No Response | 2 | 5.1 | 5 | 4.8 | 6 | 6.6 | 13 | 5.6 |
| | Total | 39 | | 104 | | 90 | | 233 | |
| 6. Would you have received this training if you had not completed high school? | Yes | 0 | - | 3 | 33.3 | 2 | 12.5 | 5 | 17.9 |
| | NO or Probably Not | 3 | 100.0 | 6 | 66.7 | 14 | 87.5 | 23 | 82.1 |
| | Total | 3 | | 9 | | 16 | | 28 | |
| 7. Have you taken additional high school or interest subjects since graduation? | Yes | 6 | 15.4 | 8 | 7.7 | 11 | 12.2 | 25 | 10.7 |
| | No | 29 | 74.4 | 81 | 77.9 | 64 | 71.1 | 174 | 74.7 |
| | No Response | 4 | 10.2 | 15 | 14.4 | 15 | 16.7 | 34 | 14.6 |
| | Total | 39 | | 104 | | 90 | | 233 | |
| 8. Are you better off financially as a result of graduating from high school? | Yes | 10 | 32.3 | 38 | 50.7 | 31 | 40.8 | 79 | 43.4 |
| | NO | 20 | 64.5 | 51 | 68.0 | 37 | 48.7 | 108 | 59.3 |
| | No Response | 9 | 29.0 | 15 | 20.0 | 22 | 28.9 | 46 | 25.3 |
| | Total | 39 | | 104 | | 90 | | 233 | |

| | | "67" | | "68" | | "69" | | Totals | |
|---|---|---|---|---|---|---|---|---|---|
| | | # of resp. | % of total | # of resp | % of total | # of resp | % of total | # of resp | Avg. % |
| 9. How much better off financially? Yes respondents to # 8 above. | Much | 4 | 40.0 | 13 | 34.2 | 7 | 20.6 | 24 | 29.3 |
| | Some | 6 | 60.0 | 23 | 60.5 | 27 | 79.4 | 56 | 68.3 |
| | No Response | 0 | | 2 | 5.3 | 0 | | 2 | 2.4 |
| | Total | 10 | | 38 | | 34* | | 82* | |
| 10. Do you feel the time and effort you put into completing high school was worth it from a financial viewpoint? | Yes | 17 | 43.6 | 64 | 61.5 | 56 | 62.2 | 137 | 58.8 |
| | No | 4 | 10.3 | 14 | 13.5 | 11 | 12.2 | 29 | 12.4 |
| | No Response | 18 | 46.1 | 26 | 25.0 | 23 | 25.6 | 67 | 28.8 |
| | Total | 39 | | 104 | | 90 | | 233 | |
| 11. Are you better off socially as a result of graduating from the adult program? | Yes | 35 | 89.7 | 102 | 98.1 | 83 | 92.2 | 220 | 94.4 |
| | No | 3 | 7.7 | 2 | 1.9 | 5 | 5.6 | 10 | 4.3 |
| | No Response | 1 | 2.6 | 0 | | 2 | 2.2 | 3 | 1.3 |
| | Total | 39 | | 104 | | 90 | | 233 | |
| 12. How much better off socially? | Much | 13 | 33.3 | 54 | 51.9 | 31 | 34.4 | 98 | 42.1 |
| | Some | 22 | 56.4 | 45 | 43.3 | 50 | 55.6 | 117 | 50.2 |
| | No or No Response | 4 | 10.3 | 5 | 4.8 | 9 | 10.0 | 18 | 7.7 |
| | Total | 39 | | 104 | | 90 | | 233 | |
| 13. Do you feel the time and effort you put into completing high school was worth it from a social viewpoint? | Yes | 37 | 94.9 | 99 | 95.2 | 81 | 90.0 | 217 | 93.1 |
| | No | 1 | 2.5 | 3 | 2.9 | 2 | 2.2 | 6 | 2.6 |
| | No Response | 1 | 2.5 | 2 | 1.9 | 7 | 7.8 | 10 | 4.3 |
| | Total | 39 | | 104 | | 90 | | 233 | |
| 14. Do you feel the tax money used to sponsor the adult program was a wise use of tax money? | Yes | 38 | 97.4 | 103 | 99.0 | 90 | 100.0 | 231 | 99.1 |
| | No | 1 | 2.6 | 1 | 1.0 | 0 | | 2 | .9 |
| | Response | | | | | | | | |
| | Total | 39 | | 104 | | 90 | | 233 | |

* Three respondents in the class of 1969 indicated how much better off they were but did not indicate being better off in #8.

| | | "67" # of resp. | "67" % of total | "68" # of resp. | "68" % of total | "69" # of resp. | "69" % of total | Total # of resp. | Total Avg. % |
|---|---|---|---|---|---|---|---|---|---|
| 15. Do you feel that your knowledge (of whatever subjects you studied) was improved? | Much | 21 | 53.8 | 60 | 57.7 | 57 | 63.3 | 138 | 59.2 |
| | Some | 17 | 45.6 | 44 | 42.3 | 32 | 35.6 | 93 | 39.9 |
| | No Response | 1 | 2.6 | 0 | | 1 | 1.1 | 2 | .9 |
| | Totals | 39 | | 104 | | 90 | | 233 | |
| 16. Number of individuals making additional comments to last question on questionnaire. | | 21 | 53.8 | 61 | 58.7 | 52 | 57.8 | 134 | 57.5 |

# CHAPTER III

## ANALYSIS OF DATA

Employed and Not Employed:

Using grouped data from Table III to determine whether or not the number of employed at enrollment and four years after graduation differs significantly, we placed this data into the following four-fold table.

Observed Frequencies

| | Employed | Not Employed | Total |
|---|---|---|---|
| At Enrollment | 142 | 110 | 252 |
| At Four Years | 165 | 87 | 252 |
| Total | 307 | 197 | 504 |

Expected Frequencies

| | Employed | Not Employed | Total |
|---|---|---|---|
| At Enrollment | 153.5 | 98.5 | 252 |
| At Four Years | 153.5 | 98.5 | 252 |
| Total | 307.0 | 197.0 | 504 |

The above data when placed into the chi square formula $\chi^2 = \sum \frac{(O-E)^2}{E}$ ; where

O = observed frequencies

E = expected frequencies

$\sum$ = the sum of

$\chi^2$ = chi square

yields a chi square of 4.4082, which at one degree of freedom, is significant at the .05 level of confidence.

We would reject the null hypothesis and conclude that this difference in employment at enrollment and four years after graduation is significant and could not have been a chance occurance.

Housewives and Number Employed:

Examination of Table III would reveal, however, that the greatest change occurred in the number of housewives who sought and obtained employment.

Excluding the unemployed and disabled classifications, we placed the following data from Table III into a four-fold table.

Observed Frequencies

| | Housewives | Employed | Total |
|---|---|---|---|
| At Enrollment | 107 | 142 | 249 |
| At Four Years | 75 | 165 | 240 |
| Total | 182 | 307 | 489 |

Expected Frequencies

| | Housewives | Employed | Total |
|---|---|---|---|
| At Enrollment | 93 | 156 | 249 |
| At Four Years | 89 | 151 | 240 |
| Total | 182 | 307 | 489 |

Again testing the null hypothesis of no significant difference, this data when used in the chi square formula previously listed, gives us a chi square of 6.8641 which at one degree of freedom, is significant at the .01 level of confidence.

We reject the null hypothesis and conclude that this difference would not have occured by chance and that housewives entering the labor market account for most of the change in employed workers.

Analysis of Question Number One - Observed Employer Changes and Stated Promotions:

The combined number of persons in the labor market (at the time of enrollment, or one or four years after graduation) was one hundred eighty-two. Of this total, one hundred thirty-three individuals were observed to have experienced a job change or a stated promotion. Thirty-eight of these individuals received two or more changes and/or promotions for a cummulative combined total of one hundred seventy-one observed job changes or stated promotions.

One difficulty is determining whether or not this number of observed job changes or stated promotions is significant or whether they could have occured by chance. To help us resolve this question we decided to use two assumptions:

1. Assume that one-half the number of individuals in the labor market might have experienced a job change or promotion on the basis of chance alone.
2. Assume that one-half the number of respondents (an illogical assumption) might have experienced a job change or promotion on the basis of chance alone.

Assumption 1. (50% of labor market)

Using the following data:

Observed Frequencies

| Changes or Promotions | No Changes or Promotions | Total |
|---|---|---|
| 133 | 49 | 182 |

Expected Frequencies (50% in labor market)

| Changes or Promotions | No Changes or Promotions | Total |
|---|---|---|
| 91 | 91 | 182 |

Using the preceding information in the chi square formula $\chi^2 = \sum \frac{(O-E)^2}{E}$ we obtain a chi square of 38.7692 which, at one degree of freedom, is significant at the .001 level.

Assumption 2. (50% of the respondents)

The following data:

Observed Frequency

| Changes or Promotions | No Changes or Promotions | Total |
|---|---|---|
| 133 | 100 | 233 |

Expected Frequency (50% of Respondents)

| Changes or Promotions | No Changes or Promotions | Total |
|---|---|---|
| 116.5 | 116.5 | 233 |

when placed in the chi square formula ($\chi^2 = \sum \frac{(O-E)^2}{E}$) gives us a chi square of 4.6738 which, at one degree of freedom, is significant at the .05 level of confidence.

We conclude that the number of individuals observed to have experienced job changes and stated promotions is too great to have occured by chance. The adult program has therefore contributed substantially to these changes or promotions.

Observed Job Changes and Stated Promotions at One and Four Years:

To determine if there were any significant differences in the number of observed changes and promotions at one and four-years after graduation, we placed the following information in a four fold table and used the null hypothesis of no significant difference:

Observed Frequencies

| | Changes or Promotions | No Changes or Promotions | Total |
|---|---|---|---|
| At One Year | 87 | 95 | 182 |
| At Four Years | 84 | 98 | 182 |
| Total | 171 | 193 | 364 |

Expected Frequencies

| | Changes or Promotions | No Changes or Promotions | Total |
|---|---|---|---|
| At One Year | 85.5 | 96.5 | 182 |
| At Four Years | 85.5 | 96.5 | 182 |
| Total | 171.0 | 193.0 | 364 |

The above figures, when used in the chi square formula, yield a chi square of .0992 which, at one degree of freedom is not significant at the .05 level of confidence. We accept the null hypothesis.

It appears that the changes or promotions observed occur as frequently at one as at four years after graduation for the three classes combined here.

Differences between Classes - Occurances at One and Four Years:

To see if there were any significant differences between these three classes, we used the null hypothesis of no difference, and the foldowing data:

Observed Frequencies

| | Changes or Promotions At One Year | Changes or Promotions At Four Years | Total |
|---|---|---|---|
| Class of 67 | 17 | 12 | 29 |
| Class of 68 | 35 | 41 | 76 |
| Class of 69 | 35 | 31 | 66 |
| Total | 87 | 84 | 171 |

Expected Frequencies

| | Changes or Promotions At One Year | Changes or Promotions At Four Years | Total |
|---|---|---|---|
| Class of 67 | 14.8 | 14.3 | 29 |
| Class of 68 | 38.9 | 37.3 | 76 |
| Class of 69 | 33.3 | 32.4 | 66 |
| Total | 87.0 | 84.0 | 171 |

The above data when processed in the chi square formula yields a chi square of 1.7193 which, at two degrees of freedom, is not significant at the .05 level of confidence.

One concludes that when the data of these three classes is grouped there appears to be no significant difference in the number of changes or promotions by classes at one and four years after graduation.

Difference Between Classes - Individual Number in Labor Market:

Another check, using the null hypothesis, and the following data:

Observed Frequencies

| | Individuals Experiencing Change or Promotions | Individuals Not Experiencing Change or Promotions | Total |
|---|---|---|---|
| Class of 67 | 24 | 7 | 31 |
| Class of 68 | 59 | 16 | 75 |
| Class of 69 | 50 | 26 | 76 |
| Total | 133 | 49 | 182 |

Expected Frequencies

| | Individuals Experiencing Change or Promotions | Individuals Not Experiencing Change or Promotions | Total |
|---|---|---|---|
| Class of 67 | 22.7 | 8.3 | 31 |
| Class of 68 | 54.8 | 20.2 | 75 |
| Class of 69 | 55.5 | 20.5 | 76 |
| Total | 133.0 | 49.0 | 182 |

The preceding data when placed in the chi square formula yields a chi square of 3.4936 which, at two degrees of freedom, is not significant at the .05 level of confidence.

There appears to be no significant difference among these three classes in the number of individuals experiencing changes or promotions.

Difference Between Classes - Number of Multiple Job Changes:

Table IV also listed the number of individuals reporting two or more job changes or promotions.

The following data placed in a three by two table and the null hypothesis was used to test for differences in multiple changes or promotions.

Observed Frequencies

| | Number Receiving Multiple Changes or Promotions | Number Not Receiving Multiple Changes or Promotions | Total |
|---|---|---|---|
| Class of 67 | 5 | 26 | 31 |
| Class of 68 | 17 | 58 | 75 |
| Class of 69 | 16 | 60 | 76 |
| Total | 38 | 144 | 182 |

Expected Frequencies

| | Number Receiving Multiple Changes or Promotions | Number Not Receiving Multiple Changes or Promotions | Total |
|---|---|---|---|
| Class of 67 | 6.5 | 24.5 | 31 |
| Class of 68 | 15.7 | 59.4 | 75 |
| Class of 69 | 15.8 | 60.1 | 76 |
| Total | 38.0 | 144.0 | 182 |

The above data when placed in the chi square formula yields a chi square of .5810 which, at two degrees of freedom is not significant at the .05 level of confidence.

There appears to be no difference among the three classes examined here in the number reporting observable multiple job changes or stated promotions.

Analysis of Question Two:

This question asked if the graduate had received any change in jobs or promotion on the job as a result of attending and graduating from the adult high school program.

You will recall that one hundred thirty-three individuals were observed to have experienced job changes or stated promotions, while only sixty-six individuals reported such changes or promotions in response to this question.

To test the significance of this difference, assuming that fifty percent of those in the labor market might have experienced a change or promotion on the basis of chance alone, we used the following data:

Observed Frequencies

| Stated Changes or Promotions | Not Stated | Total |
|---|---|---|
| 66 | 116 | 182 |

Expected Frequencies (50% of labor market)

| Stated Changes or Promotions | Not Stated | Total |
|---|---|---|
| 91 | 91 | 182 |

This data when processed in the chi square formula gives a chi square of 13.7362 which, at one degree of freedom, is significant at the .001 level of confidence.

The difference between observed and stated frequencies is due we believe, to the phrase "as a result of attending and graduating" and to the fact that many changes or promotions do occur that cannot be directly or indirectly attributed to the adult program only.

However, if one assumes that fifty percent of the observed changes could occur by chance, the data becomes:

Observed Frequencies

| Stated Changes and Promotions | Not Stated | Total |
|---|---|---|
| 66 | 67 | 133 |

Expected Frequencies (50% of Observed Changes)

| Stated Changes and Promotions | Not Stated | Total |
|---|---|---|
| 66.5 | 66.5 | 133 |

The resulting chi square of .0074, at one degree of freedom, is not significant at the .05 level of confidence.

Using the above assumption there would appear to be no significant difference between stated and observed changes and promotions.

This later assumption would appear to be the more reasonable of the two. Nearly fifty percent of the individuals observed to have experienced job changes or promotions attribute these changes and promotions to the adult program.

Differences Between Classes - Observed and Stated Job Changes or Promotions:

To further see if any differences existed between classes in their stated and observed job changes and promotions, the following data was placed in a three by two table. Using the null hypothesis and the chi square formula, we have the following:

Observed Frequencies

| | Stated Changes or Promotions | Observed Changes and Stated Promotions | Total |
|---|---|---|---|
| Class of 67 | 11 | 29 | 40 |
| Class of 68 | 31 | 76 | 107 |
| Class of 69 | 24 | 66 | 90 |
| Total | 66 | 171 | 237 |

Expected Frequencies

| | Stated Changes or Promotions | Observed Changes and Stated Promotions | Total |
|---|---|---|---|
| Class of 67 | 11.1 | 28.9 | 40 |
| Class of 68 | 29.8 | 77.2 | 107 |
| Class of 69 | 25.1 | 64.9 | 90 |
| Total | 66.0 | 171.0 | 237 |

The above data yields a chi square of .1349 which, at two degrees of freedom, is not significant at the .05 level of confidence.

It appears that these three classes do not differ significantly in their observed and stated job changes or promotions.

Analysis of Question Three - Job Changes or Promotions Related to Adult Program:

The third question asked if the job changes and promotions received were a direct or indirect result of graduating from the adult program, or not related to the program.

Seventy-five percent of those stating they had received a job change or promotion, also reported it to be a direct or indirect result of the adult program.

Difference Between Classes -

To determine if there were any differences between classes in response to this question the following information was put into a three by two table.

Observed Frequencies

| | Directly or Indirectly Related | No Response or Not Related | Total |
|---|---|---|---|
| Class of 67 | 8 | 3 | 11 |
| Class of 68 | 24 | 7 | 31 |
| Class of 69 | 21 | 7 | 27 |
| Total | 52 | 17 | 69 |

Expected Frequencies

| | Directly or Indirectly Related | No Response or Not Related | Total |
|---|---|---|---|
| Class of 67 | 8.3 | 2.7 | 11 |
| Class of 68 | 23.4 | 7.6 | 31 |
| Class of 69 | 20.3 | 6.7 | 27 |
| Total | 52.0 | 17.0 | 69 |

This data when used in the chi square formula gives a chi square of .1245 which, at two degrees of freedom, is not significant at the .05 level of confidence.

There appears to be no significant difference in the responses of these three classes to this question.

Analysis of Question Four - Increased Income

Of those reporting a job change or promotion as a result of graduating from the adult program, a combined average of eighty percent also reported an increase in income. The remaining twenty percent either did not respond to the question or reported no increase in income.

Difference Between Classes - Grouped Data

To check for any differences between these three classes, the following information was placed in a three by two table, and the null hypothesis and chi square formula was used.

Observed Frequencies

| | Increased Income | No Increased Income | Total |
|---|---|---|---|
| Class of 67 | 8 | 3 | 11 |
| Class of 68 | 26 | 5 | 31 |
| Class of 69 | 23 | 5 | 28 |
| Total | 57 | 13 | 70 |

Expected Frequencies

| | Increased Income | No Increased Income | Total |
|---|---|---|---|
| Class of 67 | 9.0 | 2.0 | 11 |
| Class of 68 | 25.2 | 5.8 | 31 |
| Class of 69 | 22.8 | 5.2 | 28 |
| Total | 57.0 | 13.0 | 70 |

The resulting chi square of .7370, at two degrees of freedom, is not significant at the .05 level of confidence.

There apparently is no difference of significance between these three classes in their responses to this question using grouped data.

Differences Between Classes - At One Year and Four Years

To determine whether any significant difference exists between classes and the number reporting income increases at one and four years, the null hypothesis and the data below was used in a three by two table.

Observed Frequencies

Reported Income Increases

| | At 1 Year | At 4 Years | Total |
|---|---|---|---|
| Class of 67 | 11 | 8 | 19 |
| Class of 68 | 16 | 26 | 42 |
| Class of 69 | 18 | 23 | 41 |
| Total | 45 | 57 | 102 |

Expected Frequencies

Reported Income Increases

| | At 1 Year | At 4 Years | Total |
|---|---|---|---|
| Class of 67 | 8.4 | 10.6 | 19 |
| Class of 68 | 18.5 | 23.5 | 42 |
| Class of 69 | 18.1 | 22.9 | 41 |
| Total | 45.0 | 57.0 | 102 |

This data yields a chi square of 2.047 which, at two degrees of freedom, is not significant at the .05 level of confidence.

There appears to be no significant difference between the number reporting income increases at one and four years between these three classes using grouped data, although the difference reported by any single class may be significant.

Analysis of Question Five - Training Beyond High School Level

Nearly ~~eighteen~~ TWELVE (~~17.8~~ 12.) percent of the respondents of these three classes indicated additional training beyond high school level was received between graduation and four years later. When you recall that these students were all high school dropouts at the time of enrollment, this percentage seems to be remarkable.

Difference Between Classes - Training Beyond High School Level

To measure the difference between classes that may be present, the three by two table below was used, along with the null hypothesis and the chi square formula.

Observed Frequencies

| | Training Beyond High School Level | No Training Beyond High School Level | Total |
|---|---|---|---|
| Class of 67 | 3 | 36 | 39 |
| Class of 68 | 9 | 95 | 104 |
| Class of 69 | 16 | 74 | 90 |
| Total | 28 | 205 | 233 |

Expected Frequencies

| | Training Beyond High School Level | No Training Beyond High School Level | Total |
|---|---|---|---|
| Class of 67 | 4.7 | 34.3 | 39 |
| Class of 68 | 12.5 | 91.5 | 104 |
| Class of 69 | 10.8 | 79.2 | 90 |
| Total | 28.0 | 205.0 | 233 |

The obtained chi square of 4.6579, at two degrees of freedom, is not significant at the .05 level of confidence, although it would be at the .10 level.

The class of 1969, however, does have a substantially larger proportion of respondents completing some additional training than the other two classes.

Analysis of Question Six - Training Not Possible Without High School

Of those twenty-eight respondents who received training beyond the high school level, ~~85%~~ 82% of them indicated they would not or probably not have been able to receive this training without first completing their high school education.

High School Education Needed For More Advanced Training

As a check on the significance of that percentage, we put the following information into a table, as follows:

Observed Frequencies

| Training Possible Without H. S. - Yes | Training Possible Without H.S. - No | Total |
|---|---|---|
| 5 | 23 | 28 |

Assuming that 50% of these people might have obtained the training by chance, the expected frequencies would be:

Expected Frequencies

| Training Possible Without H.S. - Yes | Training Possible Without H.S. - No | Total |
|---|---|---|
| 14 | 14 | 28 |

The data when processed in the Chi square formula yields a chi square of 11.5714 which is significant at the .001 level, with one degree of freedom.

It would seem that high school training was necessary for these graduates in order to receive additional training beyond the high school level.

Difference Between Classes - Training Not Possible Without High School Completion:

Because of the number of cells of expected frequencies below five, a chi square test for differences between these three classes was not made. Observation of question six in table four would seem to indicate some difference between classes does exist since the percentage responding "no" varies from sixty-six to one hundred percent.

Analysis of Question Seven:

The combined number of graduates of these three classes who have taken additional high school or interest subjects since graduation totals twenty-five or about 11% of the respondents.

The following information was placed in a three by two table to check for any differences between classes in their responses to this question.

Differences Between Classes - Additional High School or Interest Subjects

Observed Frequencies

| | Classes Taken | Not Taken | Total |
|---|---|---|---|
| Class of 67 | 6 | 33 | 39 |
| Class of 68 | 8 | 96 | 104 |
| Class of 69 | 11 | 79 | 90 |
| Total | 25 | 208 | 233 |

Expected Frequencies

| | Classes Taken | Not Taken | Total |
|---|---|---|---|
| Class of 67 | 4.2 | 34.8 | 39 |
| Class of 68 | 11.2 | 92.8 | 104 |
| Class of 69 | 9.7 | 80.3 | 90 |
| Totals | 25 | 280 | 233 |

The above data when used in the chi square formula yields a chi square of 2.0842 which, at two degrees of freedom, is not significant at the .05 level of confidence.

There appears to be no significant difference between classes in the numbers taking additional high school or interest subjects after graduation.

There is, however, some interest in continuing education of some kind. When the Percentage of respondents taking high school or interest subjects is added to the percentage receiving training beyond high school level, a total of twenty-three percent of the respondents have studied some subject between graduation and four years after graduation.

Analysis of Question Eight:

Seventy-nine of the one hundred eighty-two persons in the labor market responded that they are better off financially as a result of graduating from the adult program. This differs from the fifty-seven reporting an increase in income by twenty-two.

This raises the question of whether this difference is significant. The data below furnishes a test for this question.

Difference in Responses to Two Questions - Better Off Financially & Increased Income:

Observed Frequencies

| | Yes | No | Totals |
|---|---|---|---|
| Better Off Financially | 79 | 103 | 182 |
| Incresed Income | 57 | 125 | 182 |
| Totals | 136 | 228 | 364 |

Expected Frequencies

| | Yes | No | Totals |
|---|---|---|---|
| Better Off Financially | 68 | 114 | 182 |
| Increased Income | 68 | 114 | 182 |
| Totals | 136 | 228 | 364 |

The above information when processed in the chi square formula yields a chi square of 5.6816 which, at one degree of freedom, is significant at the .02 level of confidence.

The reason for the difference in the responses to the two questions is not clear, but most likely is the result of responding to the one question but not the other.

Differences Between Classes - Better Off Financially:

As a further check on differences in responses between the classes to the question of being better off financially the following table is provided.

Observed Frequencies

| | Better Off Financially | Not Better Off | Total |
|---|---|---|---|
| Class of 67 | 10 | 21 | 31 |
| Class of 68 | 38 | 37 | 75 |
| Class of 69 | 31 | 45 | 76 |
| Totals | 79 | 103 | 182 |

Expected Frequencies

| | Better Off Financially | Not Better Off | Total |
|---|---|---|---|
| Class of 67 | 13.4 | 17.6 | 31 |
| Class of 68 | 32.6 | 42.4 | 75 |
| Class of 69 | 33.0 | 43.0 | 76 |
| Totals | 79 | 103 | 182 |

The above data when placed in the chi square formula yields a chi square of 3.4037 which, at two degrees of freedom, is not significant at the .05 level of confidence.

There appears to be no significant differences in the responses of the three graduating classes to this question.

Difference Between Men and Women - Better Off Financially:

To determine any difference between men and women in the labor market reporting to be better off financially, the data on responses to this question of being better off financially was separated by men and women and placed in the following table.

Observed Frequencies

| | Better Off Financially | Not Better Off | Total |
|---|---|---|---|
| Men | 37 | 45 | 82 |
| Women | 42 | 58 | 100 |
| Total | 79 | 103 | 182 |

Expected Frequencies

| | Better Off Financially | Not Better Off | Total |
|---|---|---|---|
| Men | 36 | 47 | 83 |
| Women | 43 | 56 | 99 |
| Total | 79 | 103 | 182 |

The above data when placed in the chi square formula gives a chi square of .3606 which, at one degree of freedom, is not significant.

It would appear that women do as well as men in terms of being better off financially, as a result of graduating from the adult program, if they are in the labor market.

This does not mean, however, that there may not be differences in the dollar amounts better off.

Analysis of Question Nine:

Thirty-two percent of those reporting to be better off financially said they were "much" better off, and sixty-seven percent said they were "some" better off.

Three persons in the class of 1969 answered question #9 who did not respond to question #8.

To see if the three classes differed in their responses to the question of how much better off financially they were, the data was placed in the table below.

Difference Between Classes - Better Off Financially - Much and Some Combined:

Observed Frequencies

| | Indicated How Much Better Off Financially | Not Indicated | Total |
|---|---|---|---|
| Class of 67 | 10 | 29 | 39 |
| Class of 68 | 36 | 68 | 104 |
| Class of 69 | 34 | 56 | 90 |
| Totals | 80 | 153 | 233 |

Expected Frequencies

| | Indicated How Much Better Off Financially | Not Indicated | Total |
|---|---|---|---|
| Class of 67 | 13.4 | 25.6 | 39 |
| Class of 68 | 35.7 | 68.3 | 104 |
| Class of 69 | 30.9 | 59.1 | 90 |
| Totals | 80 | 153 | 233 |

The above data when put into the chi square formula gives a chi square of 1.7915 which, at two degrees of freedom, is not significant at the .05 level of confidence.

There appears to be no significant differences in responses by classes to this question.

Difference Between Classes - Much and Some Responses Separated:

The three by two table below records the data of responses "much" and "some" Better Off Financially by classes. Two "no response" responses are omitted.

Observed Frequencies

| | Much Better Off | Some Better Off | Total |
|---|---|---|---|
| Class of 67 | 4 | 6 | 10 |
| Class of 68 | 13 | 23 | 36 |
| Class of 69 | 7 | 27 | 34 |
| Totals | 24 | 56 | 80 |

Expected Frequencies

| | Much Better Off | Some Better Off | Total |
|---|---|---|---|
| Class of 67 | 3.0 | 7 | 10 |
| Class of 68 | 10.8 | 25.2 | 36 |
| Class of 69 | 10.2 | 23.8 | 34 |
| Totals | 24.0 | 56.0 | 80 |

The above data when placed in the chi square formula yields a chi square of 2.5606 which, at two degrees of freedom, is not significant at the .05 level of confidence.

There appears to be no difference between these classes in responding to this question.

Analysis of Question Ten:

Fifty-six percent of the respondents of the three classes felt the time and effort required to complete their high school education was

worth it from a financial point of view. Twelve percent responded no, and twenty-two percent did not answer the question.

The data was placed in a three by two table as follows:

Difference Between Classes - Worth Time & Effort - Fiancial Viewpoint:

Observed Frequencies

| | Worth Time & Effort Financial View | Not Worth Time & Effort or No Response Financial View | Total |
|---|---|---|---|
| Class of 67 | 17 | 22 | 39 |
| Class of 68 | 64 | 40 | 104 |
| Class of 69 | 56 | 34 | 90 |
| Totals | 137 | 96 | 233 |

Expected Frequencies

| | Worth Time & Effort Financial View | Not Worth Time & Effort or No Response Financial View | Total |
|---|---|---|---|
| Class of 67 | 22.9 | 16.1 | 39 |
| Class of 68 | 61.2 | 42.8 | 104 |
| Class of 69 | 52.9 | 37.1 | 90 |
| Totals | 137 | 96 | 233 |

When used in the chi square formula, the above data yields a chi square of 4.4339 which, at two degrees of freedom, is not significant at the .05 level of confidence.

There appears to be no difference by classes in their responses to this question.

As one further check, the following data was placed in a three by three table.

Observed Frequencies

Worth Time and Effort - Financial View

| | Yes | No | No Response | Total |
|---|---|---|---|---|
| Class of 67 | 17 | 4 | 18 | 39 |
| Class of 68 | 64 | 14 | 26 | 104 |
| Class of 69 | 56 | 11 | 23 | 90 |
| Totals | 137 | 29 | 67 | 233 |

Expected Frequencies

Worth Time and Effort - Financial View

| | Yes | No | No Response | Total |
|---|---|---|---|---|
| Class of 67 | 22.9 | 4.9 | 11.2 | 39 |
| Class of 68 | 61.2 | 12.9 | 29.9 | 104 |
| Class of 69 | 52.9 | 11.2 | 25.9 | 90 |
| Totals | 137.0 | 29.0 | 67.0 | 233 |

The above data used in the chi square formula yields a chi square of 7.0540 which at four degrees of freedom is not significant at the .05 level of confidence.

There appears to be no difference in responses to this question by these three classes.

Analysis of Question Eleven:

Ninety-three percent of the respondents of these three classes indicate they are better off socially as a result of graduating from the adult program.

To determine whether any significant differences exist between classes, the data was placed in the following table.

Difference Between Classes - Better Off Socially:

Observed Frequencies

| | Better Off Socially | Not Better Off Or No Response | Total |
|---|---|---|---|
| Class of 67 | 35 | 4 | 39 |
| Class of 68 | 102 | 2 | 104 |
| Class of 69 | 83 | 7 | 90 |
| Totals | 220 | 13 | 233 |

Expected Frequencies

| | Better Off Socially | Not Better Off or No Response | Total |
|---|---|---|---|
| Class of 67 | 36.8 | 2.2 | 39 |
| Class of 68 | 98.2 | 5.8 | 104 |
| Class of 69 | 85.0 | 5.0 | 90 |
| Totals | 220 | 13 | 233 |

The above data when placed in the chi square formula gives a chi square of 5.0443 which is not significant at the .05 level of confidence, with two degrees of freedom.

There appears to be no significant differences between these three classes in their responses to this question.

The very high percentage of respondents being better off socially points up the significance of social importance attached to a high school education and diploma, at least to these three classes.

Analysis of Question Twelve:

Ninety-two percent of the respondents of these three classes indicated how much better off socially they were as a result of graduating from the adult program.

The following data was placed in a table to determine any differences in responses by the three classes.

Difference Between Classes - Responding How Much Better Off Socially:

Observed Frequencies

| | Much and Some Better Off Socially | No Response | Total |
|---|---|---|---|
| Class of 67 | 35 | 4 | 39 |
| Class of 68 | 99 | 5 | 104 |
| Class of 69 | 81 | 9 | 90 |
| Totals | 215 | 18 | 233 |

Expected Frequencies

| | Much and Some Better Off Socially | No Response | Total |
|---|---|---|---|
| Class of 67 | 36 | 3 | 39 |
| Class of 68 | 96 | 8 | 104 |
| Class of 69 | 83 | 7 | 90 |
| Totals | 215 | 18 | 233 |

The above data when processed in the chi square formula yields a chi square of 2.1992 which, at two degrees of freedom, is not significant at the .05 level of confidence.

There appears to be no significant difference in responses by classes to this question.

As one further check the following three by three table was used.

Observed Frequencies

How Much Better Off Socially

| | Much | Some | No Response | Total |
|---|---|---|---|---|
| Class of 67 | 13 | 22 | 4 | 39 |
| Class of 68 | 54 | 45 | 5 | 104 |
| Class of 69 | 31 | 50 | 9 | 90 |
| Totals | 98 | 117 | 18 | 233 |

Expected Frequencies

How Much Better Off Socially

| | Much | Some | No Response | Total |
|---|---|---|---|---|
| Class of 67 | 16.4 | 19.6 | 3.0 | 39 |
| Class of 68 | 43.8 | 52.2 | 8.0 | 104 |
| Class of 69 | 37.9 | 45.2 | 6.9 | 90 |
| Totals | 98.0 | 117.0 | 18.0 | 233 |

The above data when placed in a chi square table yields a chi square of 16.0550 which, at four degrees of freedom, is significant at the .01 level.

It would appear that the class of 1968 differs significantly in the numbers responding much and some when compared with the other two classes.

Analysis of Question Thirteen:

In responding to the question, "Do you feel the time and effort you put into completing your high school education was worth it from a social viewpoint?", an average of 93% of the respondents answered yes.

This high percentage again emphasizes the social importance these graduates attach to a high school education and diploma.

Difference Between Classes - Worth Time & Effort - Social Viewpoint:

In an effort to determine whether or not any significant differences exist between the three classes in responding to this question, we placed the data in a three by two table as follows:

Observed Frequencies

| | Worth Time & Effort | Not Worth Time & Effort | Total |
|---|---|---|---|
| Class of 67 | 37 | 2 | 39 |
| Class of 68 | 99 | 5 | 104 |
| Class of 69 | 81 | 9 | 90 |
| Totals | 217 | 16 | 233 |

Expected Frequencies

| | Worth Time & Effort | Not Worth Time & Effort | Total |
|---|---|---|---|
| Class of 67 | 36.3 | 2.7 | 39 |
| Class of 68 | 96.9 | 7.1 | 104 |
| Class of 69 | 83.8 | 6.2 | 90 |
| Totals | 217 | 16 | 233 |

The above data when placed in the chi square formula yields a chi square of 3.6983 which, at two degrees of freedom, is not significant at the .05 level of confidence.

There appears to be no difference in responses between these three classes to this question.

The questions dealing with social benefits, numbers 11, 12, and 13 are very consistent in the percentages of favorable responses.

Analysis of Question Fourteen:

Only two of the two hundred thirty-three respondents of these three classes failed to answer this question. Ninety-nine percent of these graduates indicated they felt the money used in sponsoring the adult program was a wise use of tax money.

There are obviously no significant differences in the responses by graduating classes to this question.

Analysis of Question Fifteen:

Fifty-eight percent of the combined respondents feel that their knowledge improved "much". Forty-one plus percent responded that their knowledge had improved "some". Two respondents did not answer the question.

Again, there are no significant differences in the responses by graduating classes to this question.

Analysis of Question Sixteen:

Nearly fifty-seven percent of the respondents made additional comments on the four-year questionnaire.

The data below placed in a three by two table and used in the chi square formula yields a chi square of .2637 which, at two degrees of freedom, is not significant at the .05 level of confidence.

There appears to be no difference between classes in their number making additional comments.

Observed Frequencies

| | Commented | Did Not Comment | Total |
|---|---|---|---|
| Class of 67 | 21 | 18 | 39 |
| Class of 68 | 61 | 43 | 104 |
| Class of 69 | 52 | 38 | 90 |
| Totals | 134 | 99 | 233 |

Expected Frequencies

| | Commented | Did Not Comment | Total |
|---|---|---|---|
| Class of 67 | 22.4 | 16.6 | 39 |
| Class of 68 | 59.8 | 44.2 | 104 |
| Class of 69 | 51.8 | 38.2 | 90 |
| Totals | 134.0 | 99.0 | 233 |

While many other comparisons could be made of this data, time does not permit us to make any others.

# CHAPTER IV

## SUMMARY - CONCLUSIONS - RECOMMENDATIONS

Summary:

Most impressive in this comparative analysis was the consistency of responses by these three classes. In every case where comparison of grouped frequencies of responses by graduating classes was made, no significant differences between classes in the number of responses were found, using the chi square test and the null hypothesis.

This consistency is also visible in Table IV where percentages of frequencies of responses are nearly equal in responses to all questions by these three classes. This was true even though economic conditions, i.e., unemployment rates varied considerably in the years 1970, 1971, and 1973 when these three classes completed their questionnaires for the four-year follow-up studies.

The comparisons made appear to reinforce the findings of the individual follow-up studies of each class.

This has been the first comparative study made of the graduating classes of the Jackson County Adult Evening High School Program. As a result of this study we feel more confident that the findings of earlier studies are valid. A high school education for adults does make a difference: educationally, socially, and financially.

Many more adults need to be convinced of this fact and enrolled in programs of this type.

Conclusions:

Based upon the results of this comparative analysis of the three four-year follow-up studies - classes of 1967 - 1968 - 1969 - I conclude the following:

1. The benefits (educational, social and/or financial) do not differ significantly among these classes, regardless of class size, year of graduation, age or sex.
2. The adult program enables a significant number of housewives seek and find employment which they did not do prior to completion of high school.
3. A very significant number of these graduates who are in the labor market experience job changes or promotions far in excess of what could occur by chance. The adult program must therefore make a significant contribution to the ability of these graduates to change jobs or receive promotions.
4. Multiple job changes or promotions were reported by sixteen percent of the respondents, (or twenty-one percent of those in the labor market at any time), between enrollment and four years after graduation. This indicates that these benefits tend to be cumulative.
5. Job changes or promotions were observed to affect 73% of those in the labor market at any time. The number of individuals affected is very significant and could not have occured by chance alone. The adult program and a high school diploma, does make a difference in possible job changes or promotions to these graduates.

6. Stated changes and promotions affected sixty-six individuals, which is nearly half of the observed changes and stated promotions which affected one hundred thirty-three individuals. It would appear that nearly 50% of the total observed changes or promotions are definitely the result of graduation from the adult program.
7. Eighty percent (80.3) of the sixty-six stated changes and promotions were attributed to being a direct or indirect result of the adult program.
8. Eighty percent plus of these sixty-six individuals also reported an increase in income.
9. About twelve percent of the respondents have received additional training beyond the high school level between graduation and four years after graduation.
10. Eighty-two percent of those receiving training beyond high school level indicate that this training would not or probably not have been possible without first graduating from high school.
11. Nearly eleven percent of the respondents have taken additional high school or interest subjects between graduation and four years after graduation.
12. Nearly twenty-three percent of the respondents (#9 plus #11) then have studied some subject since graduation. When you consider that all of these graduates were dropouts at the time of enrollment, this percentage is significant.
13. A significantly greater number of these in the labor market reported being better off financially than reported an increased

income. The reason for this difference is not clear except that many responded to the one question but not the other.

14. There were no significant differences between these three classes in the number reporting to be better off financially.

15. There were no significant differences between men and women who reported being better off financially. Forty-three percent of those in the labor market reported being better off in this question.

16. Nearly one-third of those responding to be better off financially, said they were much better off and two-thirds said they were some better off.

17. Almost fifty-nine percent of the respondents, (or seventy-five percent of those in the labor market) reported the time and effort required to complete their high school education was worth it from a financial viewpoint.

18. Ninety-three percent of the respondents of these three classes report being better off socially. Nearly forty percent being "much" better off socially and nearly fifty-two percent report being "some" better off socially. The remaining eight percent either did not respond or reported being no better off socially.

19. Ninety-three percent of the respondents of these three classes also report the time and effort required to complete their high school education to be worth it from a social viewpoint.

20. Ninety-nine percent of the respondents in these three classes feel that the money used in this adult program represents a wise use of tax money. Only two respondents failed to answer this question.

21. Ninety-eight percent of the respondents indicated that they felt their knowledge had improved. Fifty-eight percent responded "much" and forty percent answered "some."
22. Fifty-seven percent of the respondents voluntarily made additional comments on the four-year questionnaires, all of which were favorable comments.
23. The responses by classes to the four-year questionnaires have been highly consistent. Chi square tests revealed no significant differences in their responses to the questions.

Recommendations:

Based upon the results of this comparative analysis and earlier follow-up studies, the following recommendations are made:

1. That the findings and conclusions of these studies be widely publicized in this area to encourage more adults to enroll in this program and to inform the general public. Non-graduates should be informed of the benefits graduates of this adult program have received: financial, social, educational, and be encouraged to enroll.
2. That programs of this type be supported by local, state, and/or federal funds to keep the cost to students as low as possible and to permit free attendance for low income students. The investment in programs of this type will be repaid many times over by the graduates of this type of program.
3. That local, state, and national studies of the dropout problem be conducted, with recommendations being made and implemented.

4. That local school districts examine their own dropout problems and attempt to resolve this problem through experimental approaches to the problem, such as individualized instruction, work-study programs, revision of curriculum, board policies, rules, granting of credit, etc.
5. That local school districts conduct follow-up studies of their graduates and dropouts to assist in the evaluation of the effectiveness of their services to both the college and the non-college bound students.
6. That new ways of attracting students to these programs be found, i.e., babysitting services, payment for attending classes, transportation allowances, etc.
7. That area schools and colleges expand continuing education opportunities by providing college credit, vocational, and interest subjects locally in the evenings at minimal cost and with minimal enrollment requirements. The evidence suggests increasing interest in education after graduation from high school.
8. That since programs of this type are at best remedial, programs for dropout prevention be developed by local school districts.
9. That teachers, administrators, school boards, and parents, as well as youth, be made fully aware of the social, educational, and financial importance of a high school education.
10. That this program be continued as long as enrollment justifies the investment made and/or it is replaced by another agency or area school.

ERIC Clearinghouse
APR 25 1973
on Adult Education